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EXAMINER

KIM, HEE-YONG

ART UNIT	PAPER NUMBER
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4192

NOTIFICATION DATE	DELIVERY MODE
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08/13/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/533,974	THOMPSON, STUART	
	Examiner	Art Unit	
	HEE-YONG KIM	4192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 15, 16 and 20-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 15, 16 and 20-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/05/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 27 is objected to because of the following informalities: it cites the processor device and the third port in the claim 1 where they do not exist. The examiner assumes that claim 27 is dependent on the claim 24.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Brazier (US patent 6,686,952), hereafter referenced as Brazier.

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4. Regarding claim 1, Brazier discloses "Surveillance Security System". Specifically Brazier discloses *a surveillance device comprising a support constructed and arranged to be secured to a structure, a first image collection device (Motion sensor 30 in Fig.2 and 3, column 4, line19) secured to the support, a second image collection device (Video Camera 32 in Fig.1, column 4, line 28) and a servo motor (Motor 23 in Fig.3, column 4, line 14), the second image collection device being moveable (Video camera rotates at column 4, line 43-49) with respect to the support by the servo motor, the second image collection device having an optical axis whereby the servo motor is constructed and arranged to regulate the direction of the optical axis of the second image collection device.*

5. Regarding claim 21, Brazier discloses everything as applied above (see claim 1). Brazier further discloses that the first image collection device (motion sensors) can be movable with a motor at column 4, line 18-33, but it can be opt to be *fixed* in use by not using motor.

6. Regarding claim 23, Brazier discloses everything as applied above (see claim 1). Brazier further discloses *wherein data collected from the first image collection device are processed to automatically detect an event such as motion (Sensor members detecting movement), and the result of such detection used to automatically control the servo motor when an event is detected (Video camera rotates where the movement is detected) at column 4, line 43-49.*

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15,16, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Dickinson (US patent 5,602,585), hereafter referenced as Dickinson.

9. Regarding claim 15, Brazier specifically discloses *a surveillance device having plural spatially image collection devices* (Motion sensor 30's in Fig.2 and 3, column 4, line19), *each spatially fixed image collection devices having a fixed field of view, at least one further camera device* (one further Motion sensor 30 in Fig.2 and 3, column 4, line19), *the at least one further camera device* (Video Camera 32 in Fig.1, column 4, line 28) *having a field of view movable in space* (Video camera rotates at column 4, line 43-49), *and processing circuitry* (circuit board 17 in Fig. 3, column 4, line 23-24) *operable in response to signals from at least one of said plural spatially fixed camera devices to cause the field of view of the at least one further camera device to include a given area* (Video camera rotates where the movement is detected, column 4, line 43-49). However Brazier fails to disclose that the above spatially fixed image collection devices are *camera devices*. However the examiner maintains that it was well known in

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the art to provide that Motion sensors can be substituted with *cameras* as taught by Dickinson.

In the similar field of view Dickinson discloses Method and System for Camera with Motion Detection. Specifically Dickinson discloses that a low cost compact security camera can be used for detecting motion instead of costly and bulky devices such as infra-red or microwave motion detector, in the abstract and at column 1, line 45-46.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier by substituting Motion sensors with cameras, as taught by Dickinson, for the purpose of low cost and compactness.

10. Regarding claim 16, the invention is similar to the claim 15 except there are additional components such as sockets, electrical connectors, communication network circuitry. The examiner assumes that we already substitute motion sensors with camera as applied to the claim 15. Therefore the examiner focuses on those additional components.

As far as the first set of *sockets* are concerned, Brazier specifically discloses a sensor disc member having plurality of slots which are equivalent to sockets, and also Fig. 2 shows that motion sensors which are interchangeable with camera as applied to claim 15, are plugged into a disc. Therefore, the examiner maintains that there exist sockets for the first set. The second set of *sockets* is related to a video camera 32 in the Fig.3 which is mounted on the upper platform and also adaptively connected to power source and to said jack in the circuit board as disclosed at column 5, line 43-55.

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Therefore, the examiner maintains that there exists a socket which enables to connect power and the circuit board.

As far as *electrical connector device for each socket* is concerned, Brazier discloses all the cameras are adapted to be connected to the circuit board, at column 5, line 5-55. Therefore, there exists an electrical connector device or equivalent for each socket

As far as *communication network* is concerned, Brazier discloses the computer jack is disposed upon the circuit board at column 4, line 25-27. Therefore, there exists a communication network.

11. Regarding claim 20, Brazier discloses everything claimed as applied above (see claim 1). Brazier further discloses *wherein the first image collection device comprises plural motion sensors, disposed to provide a substantially uninterrupted field of view*. However Brazier fails to disclose *wherein the first image collection devices are plural camera devices*. However the examiner maintains that it was well known in the art to provide *wherein the first image collection device comprises plural camera devices, disposed to provide a substantially uninterrupted field of view* as taught by Dickinson.

In the similar field of view Dickinson discloses Method and System for Camera with Motion Detection. Specifically Dickinson discloses that a low cost compact security camera can be used for detecting motion instead of costly and bulky devices such as infra-red or microwave motion detector, in the abstract and the background of the invention.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier by substituting Motion sensors with cameras, as taught by Dickinson, for the purpose of low cost and compactness.

12. Regarding claim 22, Brazier discloses everything claimed as applied above (see claim 20). Brazier further discloses that the first image collection device (motion sensors, interchangeably with camera) can be movable with a motor at column 4, line 18-33, but it can be chosen to be *fixed* in use by not using motor.

13. Claims 24 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Conoval (US patent 6,400,903), hereafter referenced as Conoval.

14. Regarding claim 24, Brazier discloses everything claimed as applied above (see claim 1). Brazier further discloses that all image collection devices are in the communication as applied in the claim 16. Brazier teaches a processor connected to all the cameras (computer jacks disposed on circuit board and video camera being conveniently connect to a computer at column 4, line 26-33).

15. However Brazier fails to disclose a specific detail of networking such that *a processor has a first port connected to receive data representatives of images collected by the first and second image collection devices, the second port connected to the servo motor for control thereof and a third port connected to a data input/output interface device*. However the examiner maintains that it was well known in the art to provide that *a processor has a first port connected to receive data representatives of*

images collected by the first and second image collection devices, the second port connected to the servo motor for control thereof and a third port connected to a data input/output interface device, as taught by Conoval.

In the similar field of view Conoval discloses Remote Camera Relay Controller Method and Apparatus. Conoval specifically discloses *a processor has a first port (LAN, column 2, line 38-40) connected to receive data representatives of images collected by the first and second image collection devices, the second port (Infrared port, column 9, line 51-58) connected to the servo motor for control thereof and a third port (Fig. 4B and 4C, Serial/USART port, column 10, line 55- column 12, line 3) connected to a data input/output interface device (Modem, Fig. 4B).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier by providing wherein *a processor having a first port connected to receive data representatives of images collected by the first and second image collection devices, the second port connected to the servo motor for control thereof and a third port connected to a data input/output interface device, as taught by Conoval, for the purpose of communication and control between a processor and cameras.*

16. Regarding claim 27, Brazier and Conoval discloses everything claimed as applied above (see claim 24). Conoval further discloses *wherein the processor device converts data from the first and second image collection devices using a communications protocol into a pulse stream (host modem receives serial data from host computer at column 10, line 55-60), for output at the third port (Modem at Fig. 4B).*

Therefore, it is inherent in Brazier *wherein the processor device converts data from the first and second image collection devices using a communications protocol into a pulse stream for output at the third port.*

17. Regarding claim 28 and 29, Brazier discloses everything claimed as applied above (see claim 1). However Brazier fails to disclose *wherein the second image collection device has a zoom input, and a field of view is variable in dependence on a control signal at the zoom input.* Also Brazier fails to disclose *wherein the second image collection device has a tilt input, and a field of view is variable in dependence on a control signal at the tilt input.* However the examiner maintains that it was well known in the art to provide *wherein the second image collection device has a zoom and tilt input, and a field of view is variable in dependence on a control signal at the zoom input,* as taught by Conoval.

In the similar field of view Conoval discloses Remote Camera Relay Controller Method and Apparatus. Specifically Conoval discloses camera with tilt support in Fig.3B, communication of camera-to-host connection and controlling tilt and zoom to make field of view selectable at column 4, line 52-60.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier by providing *wherein the second image collection device has a zoom and tilt input, and a field of view is variable in dependence on a control signal at the zoom and tilt input,* as taught by Conoval, for the purpose of providing tilting and zooming function making field of views selectable and o view the information at various view scales.

18. Regarding claim 30, the invention is equivalent to claim 1 in addition to a computer remote from the surveillance device, and communication device interconnecting them. Brazier discloses everything claimed as applied above (see claim 1). Brazier further discloses a computer and interconnection of computer and the surveillance device. However Brazier fails to disclose that the computer is *remote*. However the examiner maintains that it was well known in the art to provide *a surveillance system comprising a surveillance device in combination with a computer remote from the surveillance device, the system further comprising a communications device interconnecting the surveillance device and the remote computer*, as taught by Conoval.

Specifically Conoval discloses a local host processor (Computer) and remote camera and communication channel between them in abstract. Notice that local and remote are in the opposite with respect to the claim, but it is a matter of perspective.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier by providing *a surveillance system comprising a surveillance device in combination with a computer remote from the surveillance device, the system further comprising a communications device interconnecting the surveillance device and the remote computer*, as taught by Conoval, for the purpose of controlling cameras from remote.

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19. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Gilbert (US patent 6,337,683), hereafter referenced as Gilbert.

20. Regarding claim 25, Brazier discloses everything claimed as applied above (see claim 1). However Brazier and Dickinson fails to disclose *wherein the first and second image collection devices each include respective embedded processing circuitry, each embedded processing circuitry being connected to communicate with the first port of the processor device*. However the examiner maintains that it was well known in the art to provide *wherein the first and second image collection devices each include respective embedded processing circuitry, each embedded processing circuitry being connected to communicate with the first port of the processor device*, as taught by Gilbert.

In the similar field of view Gilbert discloses Panoramic Movie Which Simulate Movement through Multidimensional Space. Specifically Gilbert discloses that camera (*Image collection devices*) includes embedded processor in the electronic component as shown in Fig. 6 and column 6, line 52-65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier and Dickinson by providing *wherein the first and second image collection devices each include respective embedded processing circuitry, each embedded processing circuitry being connected to communicate with the first port of the processor device*, as taught by Gilbert, for the purpose of image specific processings.

21. Regarding claim 26, Brazier and Gilbert discloses everything claimed as applied above (see claim 25). Brazier further discloses that Video camera rotates where the

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movement is detected) at column 4, line 43-49. And also discloses that all the image collection devices are in the communication at column 5, line 5-55.

Therefore, *wherein the processor device is operable to monitor data received from the embedded processing device of the first image collection device and, in respect thereto, to supply commands to the servo motor via the second port*, is inherent in Brazier, because there must be a control command to enable to rotate motor through the communication.

22. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Conoval and further in view of Monroe (US-PGPUB 2004/0008253), hereafter referenced as Monroe.

23. Regarding claim 31, Brazier and Conoval discloses everything claimed as applied above (see claim 30). However, Brazier and Conoval fail to disclose *wherein the communications device comprises one or more of an Ethernet cable and a wireless communication system*. However the examiner maintains that it was well known in the art to provide *wherein the communications device comprises one or more of an Ethernet cable and a wireless communication system*, as taught by Monroe.

In the similar field of view, Monroe discloses Comprehensive Multimedia Surveillance and Response System for Aircraft, Operations Centers, Airports and Other Commercial Transports, Centers and Terminals. Specifically Monroe discloses *communications device comprises one or more of an Ethernet cable and a wireless communication system*. (Wired and wireless cameras in the paragraph 547, and a hub 112 connecting both type of devices in Fig. 9 and the paragraph 459).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier and Conoval *wherein the communications device comprises one or more of an Ethernet cable and a wireless communication system*, as taught by Monroe, for the purpose of connecting mixture of wired and wireless cameras.

24. Regarding claim 32, Brazier and Conoval disclose everything claimed as applied above (see claim 30). However, Brazier and Conoval fail to disclose *wherein the communications device comprises a wireless communication system, the wireless communication system comprising at least one of comprises a radio channel and a wireless LAN or "WiFi"*. However the examiner maintains that it was well known in the art to provide *wherein the communications device comprises a wireless communication system, the wireless communication system comprising at least one of comprises a radio channel and a wireless LAN or "WiFi"*, as taught by Monroe 2004.

Specifically Monroe discloses that a hub (112 , Fig. 9) with Wireless Access Point can accommodate wireless communication devices, and the examiner maintains that it can be chosen to be *Wireless* only. Monroe further discloses *LAN* at the paragraph 459.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier and Conoval *wherein the communications device comprises a wireless communication system, the wireless communication system comprising at least one of comprises a radio channel and a wireless LAN or "WiFi"*, for the purpose of connecting wireless cameras.

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25. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Dickinson and further in view of Cutaia (US-PGPUB 2002/0004390), hereafter referenced as Cutaia.

26. Regarding claim 33, Brazier and Dickinson disclose everything claimed as applied above (see claim 16). However Brazier and Dickinson fail to disclose *wherein the device for communicating with said socket devices and further socket devices comprises an intelligent hub device*. However the examiner maintains that it was well known in the art to provide *wherein the device for communicating with said socket devices and further socket devices comprises an intelligent hub device*, as taught by Cutaia.

In the similar field of view, Cutaia discloses Method and System for Managing Telecommunications Service and Network Interconnection. Specifically Cutatia discloses hubs (57, 61) at Fig. 1 and paragraph 35, which can be chosen as intelligent *hubs* to have more functionalities.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier and Conoval *wherein the device for communicating with said socket devices and further socket devices comprises an intelligent hub device* as taught by Cutaia, for the purpose of more active functionalities.

27. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Nayar (US patent 6,215,519), hereafter referenced as Nayar.

28. Regarding claim 34, Brazier discloses everything claimed as applied above (see claim 1). However Brazier fails to disclose *wherein a processor runs a predictive*

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control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera. However the examiner maintains that it was well known in the art to provide *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*, as taught by Nayar.

In the similar field of view, Nayar discloses Combined Wide Angle and Narrow Angle Imaging System and Method for Surveillance and Monitoring. Specifically Nayar discloses *wherein a processor runs a predictive control algorithm* (Motion Detector in Fig. 6 and its detail in figure 7A, 7B, 7C and at column 11, line 8 –o column 12, line 43) *whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera* (an exemplary fee forward term is twice the difference between the previous smoothed viewing position and the *previous actual object position*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*, as taught by Nayar, for the purpose of object tracking.

29. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Conoval and further in view of Nayar (US patent 6,215,519), hereafter referenced as Nayar.

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30. Regarding claim 35, Brazier discloses everything claimed as applied above (see claim 30). However Brazier fails to disclose *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*. However the examiner maintains that it was well known in the art to provide *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*, as taught by Nayar.

In the similar field of view, Nayar discloses Combined Wide Angle and Narrow Angle Imaging System and Method for Surveillance and Monitoring. Specifically Nayar discloses *wherein a processor runs a predictive control algorithm* (Motion Detector in Fig. 6 and its detail in figure 7A, 7B, 7C and at column 11, line 8 –o column 12, line 43) *whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera* (an exemplary fee forward term is twice the difference between the previous smoothed viewing position and the *previous actual object position*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*, as taught by Nayar, for the purpose of object tracking.

31. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Dickinson and further in view of Nayar.

32. Regarding claim 36, Brazier and Dickinson disclose everything claimed as applied above (see claim 15). However Brazier and Dickinson fail to disclose *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*. However the examiner maintains that it was well known in the art to provide *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera*, as taught by Nayar.

In the similar field of view, Nayar discloses Combined Wide Angle and Narrow Angle Imaging System and Method for Surveillance and Monitoring. Specifically Nayar discloses *wherein a processor runs a predictive control algorithm* (Motion Detector in Fig. 6 and its detail in figure 7A, 7B, 7C and at column 11, line 8 –o column 12, line 43) *whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera* (an exemplary fee forward term is twice the difference between the previous smoothed viewing position and the *previous actual object position*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier and Dickinson *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest*

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are used to determine where to aim a movable camera, as taught by Nayar, for the purpose of object tracking.

33. Regarding claim 37, Brazier and Dickinson discloses everything claimed as applied above (see claim 16). However Brazier fails to disclose *wherein a processor runs a predictive*

control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera. However the examiner maintains that it was well known in the art to provide *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera, as taught by Nayar.*

In the similar field of view, Nayar discloses Combined Wide Angle and Narrow Angle Imaging System and Method for Surveillance and Monitoring. Specifically Nayar discloses *wherein a processor runs a predictive control algorithm* (Motion Detector in Fig. 6 and its detail in figure 7A, 7B, 7C and at column 11, line 8 –o column 12, line 43) *whereby previous locations of motion of an object of interest are used to determine where to aim a movable camera* (an exemplary fee forward term is twice the difference between the previous smoothed viewing position and the *previous actual object position*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier and Dickinson *wherein a processor runs a predictive control algorithm whereby previous locations of motion of an object of interest*

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are used to determine where to aim a movable camera, as taught by Nayar, for the purpose of object tracking.

34. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Fettke (Digital Image Computing Technique and Application, Jan, 2002, pp. 1-6), hereafter referenced as Fettke.

35. Regarding claim 38, Brazier discloses everything claimed as applied above (see claim 1). However Brazier fails to disclose *having an "auto-ignore" feature to account for movement of features such as trees and plants, so that a moving camera is not sent to examine areas of no interest.* However the examiner maintains that it was well known in the art to provide *having an "auto-ignore" feature to account for movement of features such as trees and plants, so that a moving camera is not sent to examine areas of no interest, as taught by Fettke.*

In the similar field of view, Fettke discloses Comparison of Background Models for Video Surveillance. Specifically Fettke discloses the method to ignore the background motion such as *tree movement and camera shake* in the abstract and the chapter 4.2, and also discloses that this feature is employed by many autonomous video surveillance system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Brazier *having an "auto-ignore" feature to account for movement of features such as trees and plants, so that a moving camera is not sent to examine areas of no interest, as taught by Fettke, for the purpose of ignoring the movements of background objects.*

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36. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Conoval and further in view of Fettke.

37. Regarding claim 39, Brazier and Conoval disclose everything claimed as applied above (see claim 30). The reasoning of being obvious is applied in the same way as claim 38.

38. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Dickinson and further in view of Fettke.

39. Regarding claim 40, Brazier and Dickinson discloses everything claimed as applied above (see claim 15). The reasoning of being obvious is applied in the same way as claim 38.

40. Regarding claim 41, Brazier and Dickinson disclose everything claimed as applied above (see claim 16). The reasoning of being obvious is applied in the same way as claim 38.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Jules Jaffe et al., "Underwater Optical Imaging: Status and Prospects", Oceanography Vo. 14, No.3, pp 64-75, 2001

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John Klepsvik et al., "A Novel Laser Radar System for Subsea Inspection and Mapping", Oceans '94. 'Oceans Engineering for Today's Technology and Tomorrow's Preservation.' Proceedings, Sep. 1994

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEE-YONG KIM whose telephone number is (571)270-3669. The examiner can normally be reached on Monday-Thursday, 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Harold can be reached on 571-272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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